OFDM RECEIVER AND ITS FREQUENCY OFFSET COMPENSATION METHOD

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PROBLEM TO BE SOLVED: To provide an OFDM receiver where a frequency offset compensation range can be extended. SOLUTION: The OFDM receiver that receives and demodulates an OFDM signal with a start symbol added thereto prior to a data symbol is provided with a memory means 51 that stores N kinds (N is a natural number being 2 or over) of reference signals equivalent to part in the start symbol, cross- correlation means 52, 53 that calculate a cross-correlation between the OFDM signal and N kinds of the reference signals, a peak position detection means 54 that detects a peak position of N-sets of the cross-correlation values obtained by the cross-correlation means 52, 53, and a frequency offset estimate means 55 that estimates a frequency offset on the basis of the cross-correlation at N-sets of the peak positions.; The OFDM receiver compensates the frequency offset of the OFDM signal on the basis of the frequency offset estimated by the frequency offset estimate means 55.